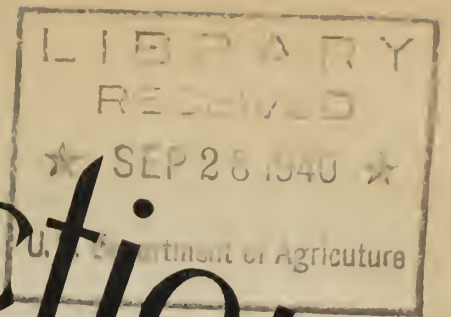


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.942
-98814

Dairy Production



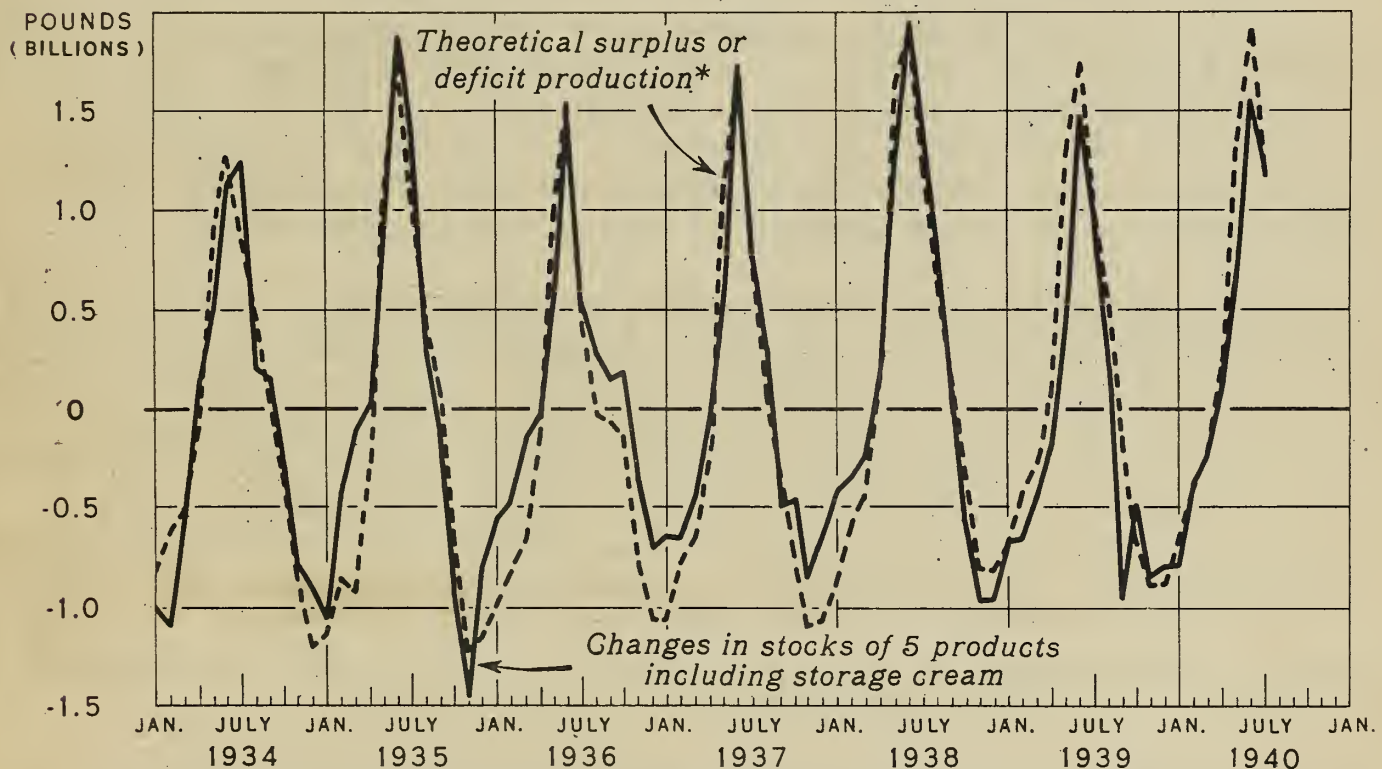
Issued Monthly by
AGRICULTURAL MARKETING SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

No. 5

A.M.S.

SEPTEMBER 16, 1940

MONTHLY CHANGES IN STOCKS OF DAIRY PRODUCTS AND SURPLUS OR DEFICIT PRODUCTION OF PRINCIPAL MANUFACTURED DAIRY PRODUCTS*, MILK EQUIVALENTS, UNITED STATES, 1934-40



*AS INDICATED BY THE SUM OF THE MILK EQUIVALENTS OF GREAMERY BUTTER, CHEESE AND CONDENSED AND EVAPORATED MILK MANUFACTURED DURING THE MONTH LESS A FLAT ALLOWANCE OF 1 POUND MILK EQUIVALENT PER DAY PER CAPITA

U. S. DEPARTMENT OF AGRICULTURE

NEG. 281 AGRICULTURAL MARKETING SERVICE

MONTH-TO-MONTH CHANGES IN THE STOCKS OF DAIRY PRODUCTS ON HAND ARE LARGE AND IMPORTANT. THESE CHANGES TEND TO APPROACH THE AMOUNT THAT PRODUCTION OF THE PRINCIPAL MANUFACTURED DAIRY PRODUCTS IS ABOVE OR BELOW THE USUAL RATE OF DISAPPEARANCE, BUT THEY SHOW VARIOUS SEASONAL AND IRREGULAR PECULIARITIES, AS EXPLAINED ON PAGE 8. IN 1940 MOVEMENTS INTO STORAGE HAVE FOLLOWED ABOUT THE USUAL SEASONAL TREND.

DAIRY PRODUCTION SUMMARY

The outstanding change in dairy conditions during August was the marked recovery of pastures in some central States. In Iowa the condition of pastures rose from below the 10-year drought-period average on the first of August to the highest September condition since 1924. With pastures improving during August in all the North Central States except Ohio and Indiana, creamery butter production, which was running 3 percent below last year at the beginning of August, was about that much above last year by the end of the month. The decline in pastures in the Northeast appears to have affected production only slightly.

The production of milk on farms in the United States declined much less rapidly than usual during August and for the month totaled 9.8 billion pounds, about $1\frac{1}{2}$ percent more than in the same month a year ago. Most of the increase over last year came in the last half of the month, for daily production at the end of the month was between 2 and 3 percent above that a year earlier as compared with an only slightly higher production at the beginning of the month. Milk production during the first 8 months of 1940 is estimated to have been 77.7 billion pounds, which would be about $1\frac{1}{2}$ percent above production in the same period last year. Daily production per capita during August averaged about 2.4 pounds, nearly 1 percent higher than in the same month last year and close to 4 percent above the 1934-38 average for August.

The production of the four principal manufactured dairy products during August appears to have been nearly 3 percent above their combined production in August last year and, as in most previous months of 1940, the total was a new high for the month. Both cheese and evaporated milk were produced in record volume for August but the production of creamery butter was slightly less than in August last year and only about average in proportion to population.

Stocks of dairy products showed about the usual increase during August and on September 1 they totaled about the usual volume per capita. After deducting Government holdings of butter, which were important in several recent years but are now nominal, the volume of commercial dairy products in storage appears to have been above average but less than in three of the last 10 years. Commercial stocks of butter were about 3 percent below last year on September 1 but by mid-September this difference had probably disappeared, for stocks in storage continued to increase till about September 7, about a week later than in 1939.

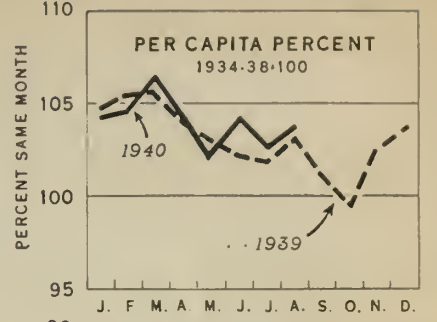
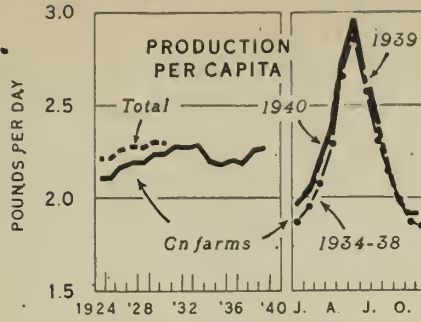
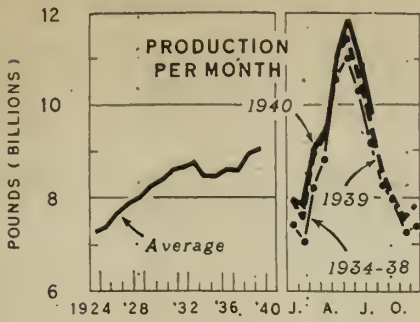
Prices of dairy products as a group have been steady but the seasonal increases in recent months have been somewhat less than usual.

The quantity of grain fed to milk cows, which was unusually high on August 1, appears to have increased fully the usual amount during August, judging from the reports received from a limited number of States.

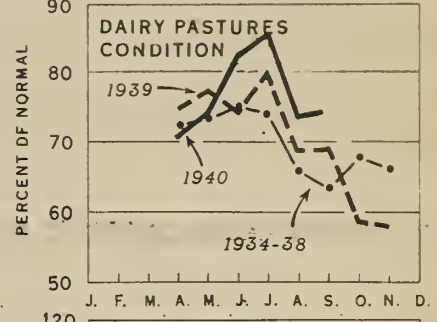
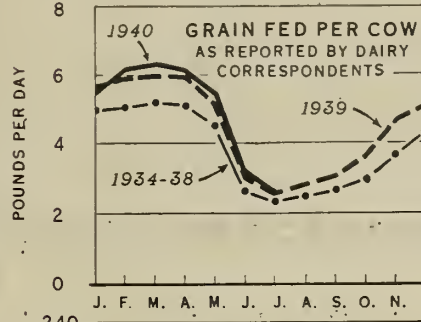
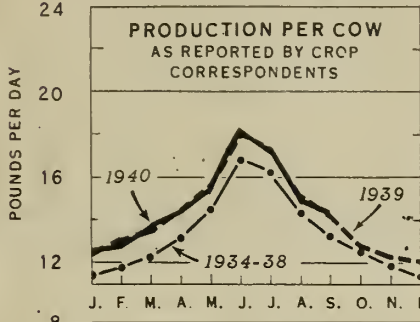
Looking ahead to the fall months, the most probable level of milk production seems likely to be somewhere around 2 to 4 percent above the 1934-38 average per capita for the same months, with the usual irregular variations in response to weather conditions and other factors. Production during September and October seems likely to be further above production in 1939 than in previous months this year, because last fall production was reduced by unusually severe drought and high temperatures in September and possibly by the rise in feed prices that occurred immediately after the outbreak of war.

DAIRY PRODUCTION: GRAPHIC SUMMARY FOR THE UNITED STATES

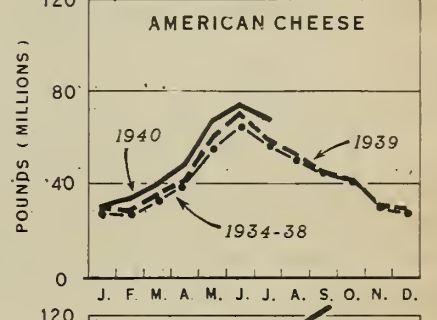
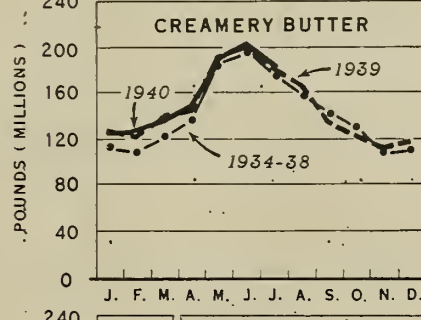
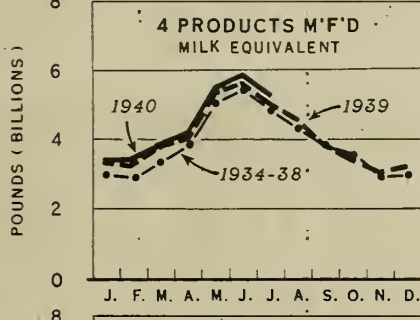
MILK PRODUCTION ON FARMS



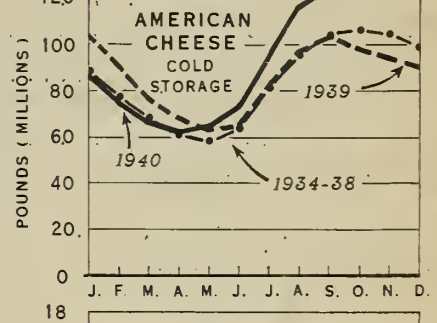
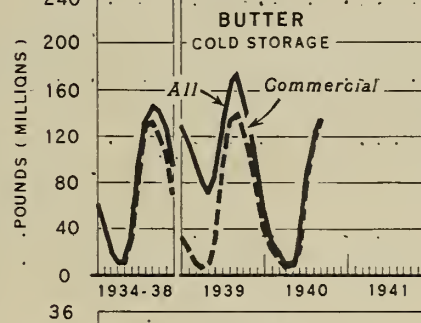
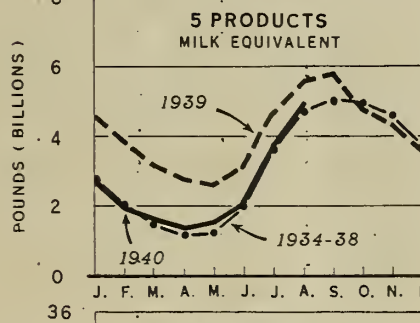
MILK PRODUCTION FACTORS



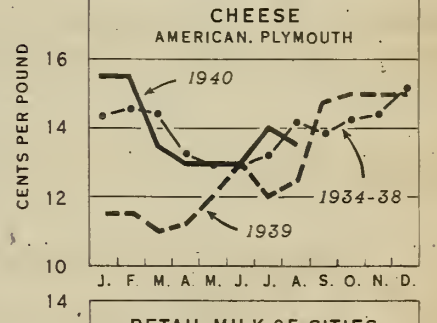
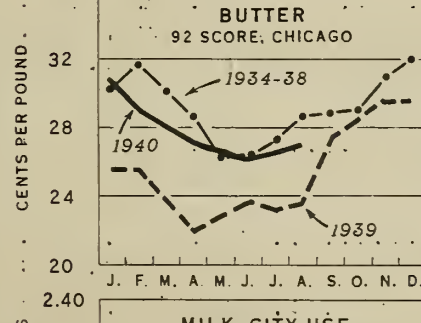
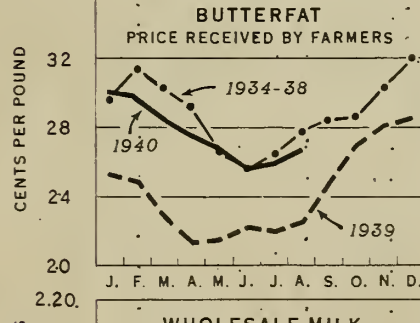
DAIRY PRODUCTS MANUFACTURED



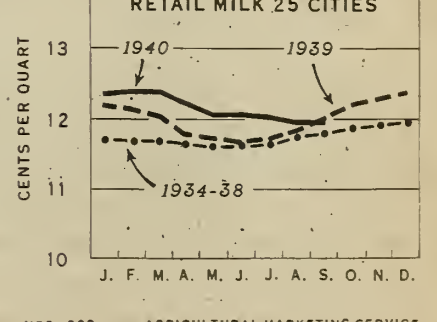
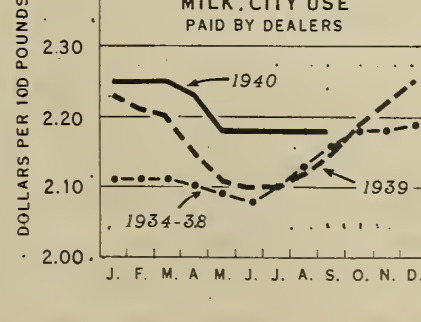
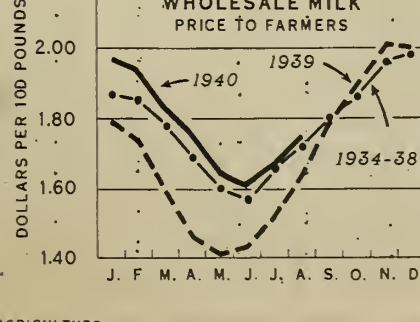
STOCKS



PRICES



PRICE OF MILK



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Dairy Production

SUMMARY OF DAIRY STATISTICS FOR THE UNITED STATES

September 16, 1940

				Average:		1940	
				1934-38:	1939	Total	Percent
						or avg.	of 1939
MILK PRODUCTION ON FARMS							
Total, per month..... mil.lbs.	June	:10,996	: 11,464	: 11,805	a/	: 103.0	
	July	:10,266	: 10,671	: 10,834	a/	: 101.5	
	Aug.	: 9,194	: 9,672	: 9,812	a/	: 101.4	
Per capita, daily average..... lbs.	July	: 2.578	: 2.623	: 2.644	a/	: 100.8	
	Aug.	: 2.307	: 2.376	: 2.393	a/	: 100.7	
Per cow, per day..... lbs.	July 1	: 16.24	: 17.27	: 17.43		: 100.9	
(As reported by crop correspondents)	Aug. 1	: 14.27	: 15.10	: 14.98		: 99.2	
	Sept. 1	: 13.23	: 14.17	: 14.38		: 101.5	
DAIRY PASTURES: Condition, % of normal							
pct.	Aug. 1	: 65.7	: 68.7	: 73.5		: 107.0	
	Sept. 1	: 63.2	: 68.8	: 74.1		: 107.7	
PRODUCTION OF MANUFACTURED DAIRY PRODUCTS							
Creamery butter, monthly..... mil.lbs.	July	: 174.5	: 180.0 b/	: 183.5 b/		: 101.9	
	Aug.	: 156.4	: 165.1 b/	: 164.0 ad/		: 99.3	
weekly..... week ending	Aug. 29	: ---	: ---	: ---		: 101.8	
	Sept. 5	: ---	: ---	: ---		: 107.6	
American cheese..... mil.lbs.	July	: 55.8	: 61.2	: 67.5 b/		: 110.3	
	Aug.	: 49.6	: 54.4 b/	: 57.5 ad/		: 105.7	
Evaporated milk, case..... mil.lbs.	June	: 249.6	: 267.5 a/	: 294.2 a/		: 110.0	
	July	: 205.7	: 226.7 a/	: 260.7 a/		: 115.0	
4 products, milk equivalent..... mil.lbs.	June	: 5,469	: 5,656	: 5,865		: 103.7	
(Creamery butter x 21, all cheese except skim-	July	: 4,827	: 5,025	: 5,270		: 104.9	
x 10, canned cond. & evap. milk x 2.2)	Aug.	: 4,291	: 4,562	: ---		: 102.8 c/	
STOCKS ON HAND							
Butter in cold storage..... mil.lbs.	Aug. 1	: 131.8	: 165.2	: 123.6		: 74.8	
(Including government holdings)	Sept. 1	: 145.1	: 172.8	: 134.5 a/		: 77.8	
Commercial holdings, only.....	Sept. 1	: 131.4	: 138.8	: 134.3 a/		: 96.8	
American cheese..... mil.lbs.	Aug. 1	: 95.0	: 97.4	: 116.0		: 119.1	
(Cold storage holdings)	Sept. 1	: 104.0	: 103.6	: 125.1 a/		: 120.8	
Evaporated milk, case..... mil.lbs.	July 1	: 256.0	: 292.4	: 288.6		: 98.7	
(Manufacturers' stocks)	Aug. 1	: 253.1	: 341.7	: 321.3		: 94.0	
5 products, milk equivalent..... mil.lbs.	July 1	: 3,622	: 4,629	: 3,739		: 80.8	
(Butter, all cheese, canned cond. & evap.	Aug. 1	: 4,682	: 5,585	: 4,952		: 88.7	
milk plus cream in cold storage)	Sept. 1	: 5,056	: 5,799	: 5,258 cd/		: 90.7	
PRICES							
Butterfat, per pound..... cts.	July 15	: 26.5	: 22.0	: 25.9		: 117.7	
(Prices received by farmers)	Aug. 15	: 27.7	: 22.4	: 26.7		: 119.2	
Butter, wholesale, per pound..... cts.	Aug.	: 28.6	: 23.5	: 27.0		: 114.9	
(92 score, Chicago)	Sept.	: 28.8	: 27.4	: 27.0 e/		: 98.5	
American cheese, wholesale, per pound.... cts.	Aug. 15	: 14.20	: 12.50	: 13.50		: 108.0	
(Twins, Plymouth, Wisconsin)	Sept. 15	: 13.85	: 14.75	: 13.50 d/		: 91.5	
Milk, wholesale, per 100 pounds..... dol.	July 15	: 1.66	: 1.54	: 1.68 b/		: 109.1	
(All purposes, prices received by farmers)	Aug. 15	: 1.72	: 1.68	: 1.75 a/		: 104.2	
Milk for city distribution, per 100 lbs. dol.	Aug.	: 2.13	: 2.12	: 2.18		: 102.8	
(Prices paid by dealers, 3.5% basis)	Sept.	: 2.16	: 2.15	: 2.18		: 101.4	
Milk, retail, delivered, per quart..... cts.	Aug.	: 11.75	: 11.85	: 11.98		: 101.1	
(Average, 25 markets)	Sept.	: 11.81	: 12.02	: 12.02 a/		: 100.0	

a/ Preliminary. b/ Preliminary revision. c/ Forecast or interpolation.

d/ Not available when accompanying chart was prepared. e/ Price September 13.

Milk production per cow in herds kept by crop correspondents on September 1 averaged 14.38 pounds, the highest for the date in the 16 years of record. Production per cow appears to have been high in all parts of the country with September averages for various regions ranging from 7 percent above the 1929-38 average in the North Atlantic group of States to 14 percent above average in the West North Central group. Production per cow was at record high September 1 levels in New York, Michigan, Iowa, Missouri, Oregon, and was below the 10-year average in only 4 of the 48 States - mostly unimportant from a milk-producing standpoint.

As compared with September 1 a year ago, production per cow in the North Atlantic States was up 5 percent, reflecting considerably better pasture and feed crop conditions. For other major groups of States, however, production per cow ranged from slightly below that a year ago to about 2 percent above.

Improved August pasturage in the upper Mississippi Valley did much to bring about recovery from the unusually sharp reduction in milk flow evident in that area during late July. The stimulation of milk production was most pronounced in States west of the river and the entire West North Central group showed only about a fifth the usual August decline in milk flow. The drying of pastures in important dairy States from Indiana eastward no doubt tended to reduce milk production but in this area the decline in pastures appears to have been largely offset by liberal feeding of supplementary rations.

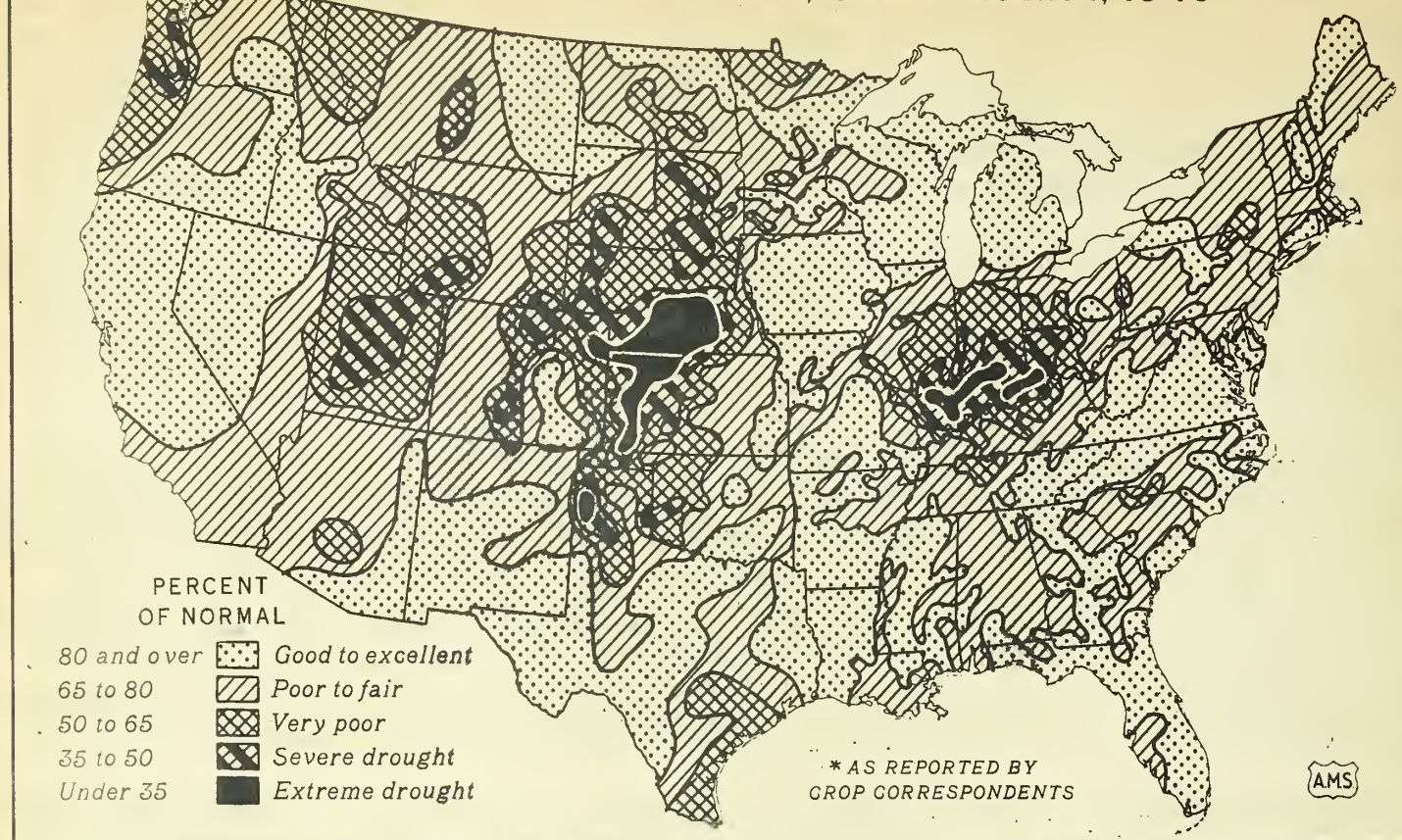
The proportion of cows milked in herds kept by crop correspondents averaged 74.3 percent on September 1, materially above the 10-year average for the date but less than in any of the past 3 years.

MONTHLY MILK PRODUCTION ON FARMS, UNITED STATES
1934-38 Average, 1939, and 1940

	MONTHLY TOTAL			DAILY AVERAGE PER CAPITA		
Month	Average			Average		
	1934-38	1939	1940	1934-38	1939	1940
	Million pounds			Pounds		
January	7,422	7,935	7,961	1.870	1.957	1.949
February	7,044	7,534	7,791	1.950	2.056	2.038
March	8,221	8,869	9,006	2.069	2.185	2.202
April	8,809	9,347	9,447	2.290	2.379	2.386
May	10,537	11,084	11,067	2.649	2.728	2.704
June	10,996	11,464	11,805	2.855	2.914	2.979
July	10,266	10,671	10,834	2.578	2.623	2.644
August	9,194	9,672	9,812	2.307	2.376	2.393
September	8,262	8,533		2.141	2.165	
October	7,942	8,077		1.990	1.981	
November	7,227	7,556		1.870	1.914	
December	7,383	7,816		1.847	1.915	

Feed prospects have improved. A big hay crop has been harvested. Oats and barley yielded above expectations. Prospects for corn, sorghums and cottonseed are much better than a month ago. Although feed crops are poor in some limited areas, as in most of Nebraska and in some parts of the Ohio Valley, most sections of the country will have at least their usual supply of feed grain, if sealed corn is counted as part of the supply. Current supplies, excluding sealed corn, are less abundant but adequate. The price of corn is relatively high but oats and barley as well as linseed meal and various other mill feeds are fairly cheap.

PASTURE CONDITION, SEPTEMBER 1, 1940*



U. S. DEPARTMENT OF AGRICULTURE

NEG. 284 AGRICULTURAL MARKETING SERVICE

The condition of dairy pastures improved markedly in most of the principal midwest butter and cheese producing States during August but there was an equally marked decline in an area extending from central Illinois and Kentucky to Maine, including the principal northeastern market milk producing States except New Jersey and Maryland. Despite these changes pastures in the country as a whole were still fair to good on September 1, averaging better than on the same date during any of the last 10 years except 1935 and 1938. In all groups of States except the South Atlantic, however, they were still below the average for September 1 in periods prior to 1930.

There was probably some improvement in the first half of September as most of the northeastern area received good rains about the last of August. In early September moisture conditions were favorable in most of the more important eastern and central dairy States except parts of Indiana, Illinois and Nebraska. Since early September the rainfall was very light in most northeastern and central States but there have been some good rains in Kansas and over much of the West.

September Dairy Pastures: Condition as percent of "normal".

Year	East North Atlantic Percent	West North Central Percent	South South Atlantic Percent	South South Central Percent	Western Western States Percent	United States Percent
Av. 1920-29	81.9	77.0	76.6	81.6	75.8	78.9
Av. 1930-34	65.6	46.9	48.1	69.7	60.2	63.8
1935	79.0	87.2	73.3	80.9	67.1	72.8
1936	56.9	36.0	19.9	67.5	43.6	70.0
1937	84.5	68.6	59.5	86.1	68.1	72.6
1938	82.0	86.2	69.2	81.6	78.0	73.1
1939	57.2	73.2	69.1	83.9	72.4	61.9
1940	73.2	74.5	74.1	82.8	73.1	70.5

DAIRY PRODUCTION

State	Milk Produced per Milk Cow in			Condition of Dairy Pastures		
	Herds Kept by Reporters 1/			2/		
	Sept. 1 : Av. 1929-38:	Sept. 1 1939	Sept. 1 1940	Sept. 1 : Av. 1929-38:	Sept. 1 1939	Sept. 1 1940
	Pounds			Percent		
Me.	14.3	14.4	16.2	74.4	68	72
N.H.	14.6	15.2	14.5	76.0	72	75
Vt.	13.1	13.5	14.4	78.7	75	75
Mass.	17.5	17.5	18.4	71.6	57	67
R.I.	3/	3/	3/	72.1	56	79
Conn.	17.5	18.2	19.6	72.1	53	84
N.Y.	16.0	15.4	17.2	66.4	50	72
N.J.	18.8	20.0	19.0	67.7	55	72
Pa.	16.4	16.7	16.9	67.2	60	74
N.ATL.	16.00	16.27	17.18	69.0	57.2	73.2
Ohio	15.6	16.4	15.7	66.3	74	62
Ind.	14.9	16.3	15.3	62.1	83	51
Ill.	14.1	15.8	15.8	59.8	89	64
Mich.	16.2	18.0	18.1	53.2	71	86
Wis.	15.0	15.8	16.5	54.6	64	87
E.N.CENT.	15.09	16.30	16.33	58.1	73.2	74.5
Minn.	12.8	14.1	14.2	52.5	72	76
Iowa	13.1	15.0	15.6	61.4	84	92
Mo.	10.3	12.4	12.6	52.9	86	81
N.Dak.	12.5	12.9	14.5	42.0	54	74
S.Dak.	10.8	12.0	12.5	40.6	45	60
Nebr.	12.8	13.4	14.0	53.4	45	44
Kans.	11.9	13.4	12.7	49.9	63	64
W.N.CENT.	12.11	13.49	13.81	52.6	69.1	74.1
Del.	3/	3/	3/	69.4	70	71
Md.	14.9	16.2	16.4	65.0	72	76
Va.	12.8	13.6	14.2	75.1	91	97
W.Va.	13.4	14.1	13.0	73.6	81	79
N.C.	12.3	13.5	13.2	80.3	89	85
S.C.	10.6	10.4	11.2	69.2	81	72
Ga.	9.0	9.7	9.5	71.8	84	78
Fla.	3/	3/	3/	82.0	87	86
S.ATL.	11.61	12.43	12.57	73.7	83.9	82.8
Ky.	12.9	13.7	13.3	71.4	84	60
Tenn.	11.4	12.6	12.1	69.7	81	78
Ala.	3/	3/	3/	73.0	87	76
Miss.	7.6	7.9	7.7	70.4	82	81
Ark.	8.5	9.4	9.7	54.9	72	83
La.	3/	3/	3/	73.2	80	83
Okla.	9.8	11.6	11.3	47.4	59	71
Tex.	9.1	9.6	9.7	56.7	60	71
S.CENT.	9.58	10.43	10.41	62.2	72.4	73.1
Mont.	13.8	16.5	15.2	52.6	69	74
Idaho	17.3	18.9	18.8	72.8	68	72
Wyo.	13.4	13.9	14.1	68.6	57	67
Colo.	13.3	14.9	15.1	63.2	45	56
N.Mex.	3/	3/	3/	66.8	72	71
Ariz.	3/	3/	3/	82.5	75	71
Utah	3/	3/	3/	70.4	55	53
Nev.	3/	3/	3/	75.2	74	89
Wash.	17.6	18.9	17.9	64.0	60	63
Oreg.	15.3	16.5	16.8	68.4	61	62
Calif.	17.6	20.0	20.0	71.1	64	82
WEST.	15.36	17.07	16.98	67.8	61.9	70.5
U.S.	13.08	14.17	14.38	61.2	68.8	74.1

1/ Averages represent the reported daily milk production of herds kept by reporters divided by the total number of milk cows (in milk or dry) in these herds. Figures for New England States are based on combined returns from Crop and Special Dairy reporters and are weighted by counties. Figures for other States, regions, and U. S. are based on returns from Crop Reporters only.

2/ State averages are based on reports by crop correspondents. For regional and U. S. averages the States are combined in proportion to the importance of pastures to dairy production on September 1.

3/ State averages omitted because of instability, but reports are included in arriving at regional averages.

DAIRY INDICATIONS AND THEIR USE

Stocks of five dairy products on first of month. Just as current stock of individual dairy products have an important relation to prospective market supplies and prices of butter and of the various kinds of cheese, so the volume of all dairy products on hand is one of the important factors that may be expected to affect the future trends of supplies, prices, and production of dairy products as a whole. Information is far from complete, but by adding together, in milk equivalents, the creamery butter, cheese and cream in cold storage and the canned condensed and evaporated milk in the hands of manufacturers it is possible to summarize in a single figure most of what is known currently regarding the supplies of dairy products on hand. The preliminary total for the first of the current month is shown on page 4 as "Stocks, 5 products" and more precise records for previous months, based on the final Agricultural Marketing Service enumerations of cold storage holdings, and manufacturers' stocks, are shown in the graph on page 3.

Although this record of stocks of dairy products includes the bulk of the holdings and serves for many rough calculations it is neither complete nor precise. Disregarding seasonal and regional variations in the composition of the milk used, the aggregate stocks are computed by using constant rounded conversion factors (21 times butter, 10 times cheese, 2.2 times canned milk, 840 times cans of 40 per cent cream). Since the total includes cheese being cured and sometimes large quantities of butter held by Governmental agencies for relief distribution, not all of the stocks are part of the currently available commercial supply. The present estimates of stocks also omit holdings of the 5 products in certain positions, chiefly products being assembled for packaging or processing, held temporarily where produced, in transit, or in stores or private storages of wholesale and retail dealers. Some cheese is also held in refrigerated cool storage (over 45 degrees) or in cellar storage during cold weather. Stocks of other dairy products are believed to be relatively unimportant although they include bulk condensed milk, ice cream, dry milk, skim milk products, a small amount of "packing stock butter" in cold storage and such farm butter as is held by country merchants or on the farms.

Month-to-month changes in stocks of dairy products, computed from the combined milk equivalents of known holdings on the first of each month, provide a rough but sensitive indication of changes in the relation of production plus net imports to movements into the hands of dealers and consumers. A comparison of changes in stocks of the individual dairy products with production shows various important differences. Some of these quite obviously reflect changes in consumption or in imports while others are clearly due to deficiencies in the record of stocks. Stocks of creamery butter in cold storage show changes which appear to follow quite closely the variations in production above or below normal, except for a lag during the into-storage period and some minor differences. So many of the latter appear to reflect seasonal changes in prices and in oleomargarine consumption, relief distribution and occasional imports that the unknown seasonal changes in farm butter production do not appear to have affected butter storage materially. Cheese shows an upward trend in consumption, and an irregular lag between production and movement into cold storage. There are also seasonal differences which suggest that considerable cheese is not put into cold storage until hot weather and some not even then. Stocks of evaporated milk held by manufacturers show very large changes in occasional months due to increases or decreases in speculative holdings by others. Notwithstanding all these irregularities and the inclusion of frozen cream, the monthly changes in the total known stocks of dairy products have tended to follow the production of the principal products with considerable regularity, as shown by the graph on the first page, and major departures have usually indicated significant changes in conditions.